

Biomass-derived graphene-like catalyst material for oxygen reduction reaction

Kaare, Kätlin; Yu, Eric; Käämbre, Tanel; Volperts, Aleksandrs; Dobeles, Galina; Zhurinsh, Aivars; Niaura, Gediminas; Tamasauskaitė-Tamasiunaite, Loreta; Norkus, Eugenijus; Kruusenberg, Ivar ChemNanoMat 2021 <https://doi.org/10.1002/cnma.202000615>

CO₂ turned into a nitrogen doped carbon catalyst for fuel cells and metal-air battery applications

Ratso, Sander; **Walke, Peter; Mikli, Valdek;** Locs, Janis; Šmits, Krišjānis; Vitola, Virginija; Šutka, Andris; Kruusenberg, Ivar Green chemistry 2021 / p. 4435–4445 <https://doi.org/10.1039/D1GC00659B> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrocatalysis of oxygen reduction on multi-walled carbon nanotube supported copper and manganese phthalocyanines in alkaline media

Kaare, Kätlin; Kruusenberg, Ivar; Merisalu, Mairo; Matisen, Leonard; Sammelselg, Väino; Tammeveski, Kaido Journal of solid state electrochemistry 2016 / p. 921–929 : ill <https://doi.org/10.1007/s10008-015-2990-9>

The electrochemical reduction of oxygen on noble metal free and biomass-based carbon nanomaterials = Hapniku elektrokeemiline redutseerumine väärismetalli-vabadel ja biomassil põhinevatel süsiniku nanomaterjalidel

Kaare, Kätlin 2022 <https://doi.org/10.23658/taltech.48/2022> <https://digikogu.taltech.ee/et/Item/0e17c0ff-8910-49a1-a7f3-8525b28b4b77> https://www.eester.ee/record=b5511685*est

Heteroatom-doped nanocarbons derived from black liquor as the oxygen reduction reaction catalysts

Kaare, Kätlin; Kruusenberg, Ivar; Volperts, Aleksandrs; Zhurinsh, Aivars; Dobeles, Galina; **Walke, Peter; Mikli, Valdek** GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 53 https://fntdk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf

Highly active wood-derived nitrogen-doped carbon catalyst for the oxygen reduction reaction

Kaare, Kätlin; Yu, Eric; Volperts, Aleksandrs; Dobeles, Galina; Zhurinsh, Aivars; Dyck, Alexaner; Niaura, Gediminas; Tamasauskaitė-Tamasiunaite, Loreta; Norkus, Eugenijus; Andrulėvičius, Mindaugas; **Danilson, Mati;** Kruusenberg, Ivar ACS omega 2020 / p. 23578-23587 : ill <https://doi.org/10.1021/acsomega.0c01974> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Identification of active sites for oxygen reduction reaction on nitrogen- and sulfur-codoped carbon catalysts

Villemson, Karl Markus; **Kaare, Kätlin;** Raudsepp, Ragle; Käämbre, Tanel; Šmits, Krišjānis; Wang, Pangpang; Kuzmin, Anton V.; Šutka, Andris; Shaiyana, Bagrat A.; Kruusenberg, Ivar Journal of physical chemistry C 2019 / p. 16065-16074 <https://doi.org/10.1021/acs.jpcc.9b00117>

New carbon-based catalyst synthesis from spent li-ion batteries for electrochemical oxygen reduction

Kazemi, Maryam; Liivand, Kerli; Kruusenberg, Ivar; **Walke, Peter; Mikli, Valdek; Uibu, Mai;** Macdonald, Digby D. GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 42 https://fntdk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf

Nickel and nitrogen-doped bifunctional ORR and HER electrocatalysts derived from CO₂

Rommel, Anna-Liis; Ratso, Sander; Divitini, Giorgio; **Danilson, Mati; Mikli, Valdek; Uibu, Mai;** Aruväli, Jaan; Kruusenberg, Ivar ACS Sustainable Chemistry and Engineering 2022 / p. 134-145 <https://doi.org/10.1021/acssuschemeng.1c05250> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Oxygen electroreduction on Fe-containing nitrogen-doped carbon nanotubes

Ratso, Sander; Kruusenberg, Ivar; Sarapuu, Ave; **Rauwel, Protima** BEC 16 : the 6th Baltic Electrochemistry Conference : Electrochemistry of Functional Interfaces and Materials : 15th-17th June 2016, Helsinki, Finland 2016 / p. 18

Oxygen electroreduction on Zinc and Dilithium phthalocyanine modified multiwalled carbon nanotubes in alkaline media

Türk, Karl-Kalev; Kaare, Kätlin; Kruusenberg, Ivar; Merisalu, Mairo; Joost, Urmas; Matisen, Leonard; Sammelselg, Väino; Zagal, José H.; Tammeveski, Kaido Journal of the Electrochemical Society 2017 / p. H338-H344 : ill <https://iopscience.iop.org/article/10.1149/2.0821706jes/pdf>

Spent Li-Ion battery graphite turned into valuable and active catalyst for electrochemical oxygen reduction

Liivand, Kerli; Kazemi, Maryam; **Walke, Peter; Mikli, Valdek;** Macdonald, Digby D.; Kruusenberg, Ivar ChemSusChem 2021 / p. 1103-1111 <https://doi.org/10.1002/cssc.202002742> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sustainable co₂-derived nanoscale carbon support to a platinum catalyst for oxygen reduction reaction

Najafli, Erkin; Ratso, Sander; Ivanov, Y.P.; Gatalo, M.; Pavko, L.; **Yörük, Can Rüstü; Walke, Peter;** Divitini, G.; Hodnik, N.; Kruusenberg, Ivar GSFMT Scientific Conference 2023 : Tartu, 23-24 May, 2023 : abstracts 2023 <https://fntdk.ut.ee/programm-2023/>